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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,455	03/01/2002	Jonathan Sherman	FG-17	6668

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STANGER & DREYFUS
608 SHERWOOD PKWY
MOUNTAINSIDE, NJ 07092

EXAMINER

WOOD, KEVIN S

ART UNIT	PAPER NUMBER
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2874

DATE MAILED: 07/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,455

Applicant(s)

SHERMAN ET AL.

Examiner

Kevin S Wood

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☒ Claim(s) 17 and 18 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: See Ref

DETAILED ACTION

Drawings

1. This application contains informal drawings. These informal drawings are acceptable for examination purposes only. New formal drawings will be required when the application is allowed.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "12" has been used to designate both opening and section view direction. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance. See Fig. 1 and Fig. 11.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "14" has been used to designate both opening and section view direction. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance. See Fig. 1 and Fig. 12.
4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:
22. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance. See the last line on page 8 of the specification.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S.

Patent Application Publication No. 2002/0197047 to Basavanhally et al.

Referring to claim 1, Basavanhally et al. discloses all the limitations of the claimed invention. Basavanhally et al. discloses a fiber array coupler that includes: a housing (106); a front mask coupled to the housing and having a matrix of fiber seating openings (110) there through, each of the openings having one or more side walls; an unsheathed optical fiber portion (101) extending through each of the openings and having an outer cylindrical surface; and a means (108) for pressing the side surface of the fiber into engagement with the one or more side walls of the mask opening. See the figures of the reference and their respective portions of the specification.

Referring to claim 2, Basavanhally et al. discloses all the limitations of the claimed invention. Basavanhally et al. discloses the use of adhesives and epoxies to secure the fibers to the plates. See paragraph [0039] of the specification.

Referring to claim 3, Basavanhally et al. discloses all the limitations of the claimed invention. Basavanhally et al. discloses that the mask (106) has a rear surface and that the means (108) is mounted rearward of the rear surface of the mask. See Fig. 1 and Fig. 6.

Referring to claim 4, Basavanhally et al. discloses all the limitations of the claimed invention. Basavanhally et al. discloses means includes a wafer (108) having a matrix of wafer openings (110) substantially aligned with the front mask (106) to enable longitudinal translation and seating of the optical fibers (101) through the front mask opening, each of the wafer opening having at least one wafer opening sidewall for pressing on a second portion of the optical fiber when the wafer is moved relative to the front mask in a predetermined transverse direction. See Fig 3 and Fig. 4, along with their respective portions of the specification.

Referring to claim 5, Basavanhally et al. discloses all the limitations of the claimed invention. Basavanhally et al. discloses a second wafer (624) located rearward of the first wafer (108) and having a matrix of openings substantially aligned with the front face openings and each of the second wafer openings having at least one side wall for engaging a third portion of the optical fiber when the first wafer is moved from its initial position for limiting the lateral displacement of the third portion of the fiber. See Fig 6 and Fig. 7, along with their respective portions of the specification.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 6-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0197047 to Basavanhally et al. in view of U.S. Patent Application Publication No. 2002/0172490 to Bonja.

Referring to claim 6, Basavanhally et al. discloses all the limitations of the claimed invention, except Basavanhally et al. does not appear to disclose the means comprises at least one movable arm defined by the front mask. Bonja discloses a fiber positioning device that is very similar to the device of Basavanhally et al. Bonja discloses that the plates include a flexible arm (14) adjacent to the openings for the purpose of assisting the positioning and alignment of the optical fibers within the

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openings of the plates. Since Basavanhally et al. and Bonja are both from the same field of endeavor, the purpose of Bonja would have been recognized in the pertinent art of Basavanhally et al. It would have been obvious at the time the invention was made to a person of ordinary skill in the art to include flexible arms within the openings of the fiber aligning plate for the purpose of assisting the alignment and positioning of the optical fibers within the openings. See Figure 7 of the Bonja reference.

Referring to claim 7, Basavanhally et al. in view of Bonja discloses all the limitations of the claimed invention. Bonja clearly discloses that more than one flexible arm (38) may be used in each opening of the alignment plates. See Fig. 8A of the Bonja reference.

Referring to claim 8, Basavanhally et al. in view of Bonja discloses all the limitations of the claimed invention. Bonja clearly discloses that a distal end of the flexible arms (14) form a wall of the respective opening. See Fig. 1 of the Bonja reference.

Referring to claim 9, Basavanhally et al. in view of Bonja discloses all the limitations of the claimed invention. Bonja clearly discloses that flexible arm(s) moves laterally away from the other side walls when of the fiber are inserted through the opening. See Fig. 8A of the Bonja reference.

Referring to claims 10-12, Basavanhally et al. in view of Bonja discloses all the limitations of the claimed invention. Bonja clearly discloses that two non-movable side walls and a flexible arm forming a third side wall, where the two side walls intersect

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each other and the fiber outer source contacts each of the side walls and the distal end of the flexible arm. See Fig. 1 of the Bonja reference.

Referring to claims 13-15, Basavanhally et al. in view of Bonja discloses all the limitations of the claimed invention. Bonja clearly discloses that the flexible arms are made of a flexible material that flexes and engages the fiber as the fiber is inserted into the respective opening. See Fig. 1 of the Bonja reference.

Referring to claims 16, Basavanhally et al. in view of Bonja discloses all the limitations of the claimed invention. Bonja clearly discloses that elongated slots are formed between the walls of the openings and the flexible arms, where the elongated slots open into the openings. See Fig. 1 of the Bonja reference.

Allowable Subject Matter

10. Claims 17 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter:

Referring to claims 17 and 18, the prior art does not disclose the combination of all the claimed limitations of this invention. Specifically, the prior art does not disclose the flexible member being secured in one of the elongated slots.

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Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin S Wood whose telephone number is (703) 605-5296. The examiner can normally be reached on Monday-Thursday (7am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney B Bovernick can be reached on (703) 308-4819. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 307-0956.

KSW
July 16, 2003



Brian Healy
Primary Examiner

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